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Haemoptysis.

by

Edward Chandlee.

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Haemoptysis.

This disease is defined a spitting of blood: but is generally understood to be a hemorrhage from the lungs, trachea, or fauces; characterised by coughing up florid, or frothy blood, usually preceded by heat, or pain in the chest, irritation in the larynx, and a saltish taste in the mouth.

It may be easily distinguished from hematemesis, the only disease, or variety of hemorrhage it is likely to to be confounded with; as this disease consists in a vomiting of blood, usually preceded by a sense of weight, pain, or anxiety in the region of the stomach; unaccompanied by any cough, and is discharged in very considerable quantities, of a dark colour, and somewhat grumous, mixed with the other contents of the stomach.

The causes of hemorrhage generally may occasion hemoptysis, yet there are peculiarities which more particularly conduce to this event; as a narrow thorax, prominent shoulders, a long neck, delicate form, and sanguine temperament, a scrofulous habit &c.

These predispositions may be excited into action by a variety of causes; as long and loud speaking, or singing; sudden bursts of laughter; violent paroxisms of anger; great exertions, especially raising heavy weights; vicissitudes of weather, producing coughs; irregular habits of living; suppression of some customary discharge, as the hemorrhoids, or menses &c. The bleeding happens very frequently at night, when there is the least corporeal or mental excitement, owing to the horizontal posture of the body; and more particularly to the bending of the lower extremities, as this position increases the determination of blood, to the lungs.

There are several varieties of hemoptysis, arising from different causes, and attended with various degrees of danger; which very much depend upon the state of the lungs at the time, as it is not always to be considered as a primary disease, being often only a symptom or effect; and in several disorders, such as pleurisies, peripneumonies, and many fevers, its

presence, is a happy presage of a favourable termination.
1st. It may proceed from the accidental rupture of a vessel, either by a fall, a blow, or a wound. If the vessel is small, and no previous disease exists in the lungs, there is little or no danger, seldom taking place to such a degree as to prove fatal; but when it does, the effusion must be from some large vessels.
2nd. From excessive inflammation of the lungs.
3rd. From Metastasis, or translation from some other part, as in suppression of hemorrhoids, menses &c.
4th. From mere plethora, or topical congestion in the lungs, which is relieved by periodical discharges. These cases are not necessarily connected with general plethora, they are as often met with in the thin and valitudinary.
5th. From an abcess, or ulcer in the lungs; generally following ill cured pneumonia, the blood being mixed with phlegm, or purulent matter, which sometimes submits to a judicious treatment.

6th. From tubercles, associated usually with the scrofulous diathesis, which proves fatal by ending in consumption.

When proceeding from the trachea or fauces, we may sometimes, on examination, discover the source from which the hemorrhage flows. It is then discharged by a mere hawking, without any pain, cough, oppression, or febrile excitement; though sometimes a bleeding from the trachea is of very serious import demanding the utmost care.

Hemorrhage is improperly divided into active, and passive, the term passive being only used conventionally; yet in treating of hemoptysis, it is necessary, first, to notice the more active form of the disease; which is ushered in by a sense of weight, and oppression, and sometimes of slight pain, or burning in the chest, or under the sternum; a hard dry cough; some shortness, and difficulty of breathing, and a tickling sensation in the fauces, with a

full irregular pulse, and flushed countenance. It is some-times attended with fever, commencing with chills, cold extremities; pain in the back and loins, disordered stomach, constipated bowels, and lassitude, followed by heat, and excitement. Not unfrequently indeed, cases have occurred, in which all the laws of inter-mittent fever were observed; chills appearing with periodical regularity; and during the hot stage effusions of blood taking place, continuing in this way for days, or even weeks.

There is a difference in the mode, as well as the quantity of the blood discharged; sometimes being thrown up in a very small portion, attended by a rattling in the trachea, as though the tube was nearly filled with phlegm; preceded by a saltish taste in the mouth, by much irritation about the larynx, with an irresistible propensity to cough; terminating with a discharge of a single mouthful, or enduring a considerable length of time; while in

other cases it is thrown up without any effort, and so copious as to appear like a stream from the mouth.

The leading indication must be to reduce vascular action; and nothing would seem more appropriate than V.S. though this plan of treatment, is objected to by some, among which is the celebrated Cheyne; which others limit the use of the lancet to those only of plethoric constitutions with fulness and activity of circulation. But a large portion of the cases of hemorrhage and active hemorrhage too are attended not so much by a redundance of blood, as unequal distribution of it, and this may happen in individuals weak, and valetudinary.

The lungs in this disease are greatly disposed to have an inflammation; indeed the phenomena of active hemorrhage seem actions analogous to inflammation, the difference principally consisting in the state of the capillary vessels at the time. In the former condition they are relieved at once by the

effusion, while in the latter, by a more tedious process, serum, coagulable lymph, or pus is thrown out. In either case V.S. is an appropriate remedy, by removing topical congestion, and restoring an equilibrium to the circulation; thus by opening a vein in any other part of the body, thereby inviting a flow of blood to it, on the principle of revulsion the hemorrhage will generally cease. To be effectual in the more violent cases, the detraction should be large, as small and repeated bleedings will prove utterly unavailing: tending more to harass and debilitate the patient, than afford him any relief. In such cases we should at once draw a sufficient quantity to make a decided impression as nothing short will answer

As soon as a decided impression has been made by V.S. or even during the operation, should the danger be great, we may direct commencate, in substance, to be administered, in doses of a tea-

a room-full or more every 10, 15, or 20 minutes. The action it excites being propagated by sympathy to the lungs assists in closing the patulous mouths of the exhalents.

As an auxiliary to the above, should the case demand it we may safely resort to cold applications to the thorax, more particularly to the arm pits. The practice of immersion, or wrapping the whole body in cloths wet with cold water, or vinegar, appears to be fraught with danger; inasmuch as the parts concerned, already predisposed to inflammation, may be excited to subsequent catarrh, or pneumonia, laying the foundation for phthisis pulmonalis.

The above treatment will not always prove effectual. In such cases after depletion has been pursued as long as there was vigour in the circulation, the Saccharum Saturni, properly administered, will sometimes produce the happiest effects. It should be given in doses of 2, or 3 grains, with a small portion of opium, at longer or shorter inter

vals as the case may demand. It will not al ways restrain a large stream of blood, and will always prove inefficient, and sometimes detrimental unless preceded by V.S. at least while activity of pulse exists during the hemorrhage, especially in hemoptysis. This medicine was for a long time discarded from practice, from the deference paid to the authority of Boerhaave, Stahl, and Hoffman. In the progress of time, however its reputation was again restored, by the late Dr. Barton, and is now considered as a valuable article in the Materia Medica. Dr. Barton, and Dr. Mosely have also spoken highly of the Vitriolic solution, in hemoptysis.

No quiet irritation and subdue vascular action by their supposed sedative influence the Narcotics have been recommended in this disease by some practitioners. —

Opium has been much employed in hemorrhage, and is said to be exceedingly beneficial in those

proceeding from the Uterus. Its administration in the early stage of hemoptysis, ought to be confined, to those cases only where great irritation of the lungs, exist attended by spasmodic cough &c. After the force of the circulation is reduced, in active pulmonary hemorrhage, or in cases of originally opposite character, it then becomes, an appropriate remedy to allay irritation, and remove spasmodic cough &c.

From its known sedative influence, Digitalis has been exploded in this disease; but is only applicable in those cases, where depletion by the lancet, is inadmissable: such as an habitual hemoptoe, attended by cough, pain, a quick, and somewhat active pulse, with considerable mobility, and weakness. In general, it is much inferior to Ts.

Emetics have been used in checking hemoptysis, particularly by Bryan Robison of Dublin, and also, by Dr. Willis, who declares that the enlightened experience of nearly half a century, taught him to

confide in them above every other remedy, they being safe and efficacious. The practice however seems to have been altogether abandoned, from its supposed temerity, and is now deemed hazardous, except under urgent circumstances, when the ordinary remedies have failed: and especially so, when the hemorrhage is copious, from the rupture of a large vessel. In cases of an opposite character when the discharge is small, mixed with the matter expectorated from tuberculated lungs they may be administered with safety and advantage. Active vomiting, has in some instances very promptly suppressed hemorrhage from the lungs, especially when spontaneously induced.

The great advantage to be derived from this class of remedies in divided doses, is now generally acknowledged. They should not be administered however, in cases proceeding from rupture vessels. Ipecacuana is considered the best, and should be

given in grain or half grain doses with the addition of the $\frac{1}{10}$ of a grain of opium, repeated, at longer or shorter intervals in order to create a slight distress of stomach; this impression should be maintained a considerable length of time. Tartar Emetic is more applicable to those cases attended with high fever.

Several other articles have been recommended and employed by different practitioners, in the treatment of hemoptysis; many of which are perfectly inadequate to the end in view. We must not however neglect the use of purgatives. Whether we regard the reduction of vascular action, or the removal of irritation, induced by constipated bowels, cathartics, constitute a most important remedy, and should be early resorted to. The saline are considered the best of which, Epsom is the most preferable. When the stomach will bear it the Oleum Ricini, will answer a good purpose.

The contents of the prima via being much vitiated,

as is indicated by foul tongue, morbid secretions, constipation &c. cathartics of a different character become requisite. Under such circumstances Rhubarb is appropriate; though the blue pill, exhibited, conformable to the directions of Dr. Abernethy, given in doses of 3 grains at night, and taken off in the morning, by some mild cathartic, will be more effectual.

Cooperating with the foregoing general plan of treatment, local applications, may sometimes be resorted to, or indeed become necessary, - as dry cupping, or blisters. When we find the hemorrhage continue, or even when a tendency to it exists, the latter article, may be usefully applied to the chest.

Though the best course to be pursued, for the suppression of active haemoptysis, has been detailed, yet vain, and ineffectual, may all our efforts prove, unless due attention, is observed to other circumstances connected with the case; In order therefore, that they may harmonize with the general plan of

treatment, the patient should be immediately placed in bed, with his shoulders slightly elevated, and his lower extremities extended; perfect rest enjoined; his chamber cool, and well ventilated; and company excluded, not suffering him to converse. His diet, must consist of small quantities of demulcent drinks, aqueous acidulated and dark coloured.

In place of active haemoptysis, we sometimes meet with cases of a very opposite condition of the system. These are denominated passive hemorrhages, or with more propriety hemorrhages of feeble action; in which the capilary vessels of the lungs, become incapable of performing their wonted secretory office, suffering the arterial blood to ooze from their patulous mouths unchanged in its character. This condition of system is found in the weak and valetudinary, and especially those of scrofulous tendencies. Then is in this variety of haemor

hage a slight cough, quick pulse, soft skin, sallow countenance, and hectic flush, the blood being discharged, in streaks on the sputa, sometimes copiously.

The leading indication is evidently, first, to check the hemorrhage, by any, or all of the foregoing means, except V.S. for which local bleeding may be substituted, if necessary. Secondarily to support the system, and through it, impart tone, and strength to the vessels of the lungs.

Peruvian bark alone, or combined with myrh, or the chalybeates is good, the latter combination more especially. The Muriatic tincture of iron, may also be used, though the sulphate, answers well. Spirits Turpentine in doses of 30 drl. 40 gtts. every half hour, will sometimes check it. Then the Alum, may be used; though the saccharum saturni now becomes a more appropriate remedy being greatly superior to it.

Not much advantage is to be derived from the vegetable astringents, as Kino. Catechu &c. Much however may be expected from the mineral acids, they being more appropriate in this, than in active haemorrhage from the lungs. Either the nitric or sulphuric may be given; the latter answering best to suppress the bleeding, and the former to rectify the morbid condition with which it may be connected.

The patient should make use of a mild nourishing diet, as milk, eggs &c. and use such mild drinks as have a corroborant effect, such as malt liquors.

The above constitute the principal medicines applicable to this form of the disease, the curative effect of which, may be aided by the habitual use of exercise, especially on horseback, just preparing the patient by the proper reduction of vascular action.

To guard against frequent repetitions of the hemorrhage, a system of prophylactic instruction

should be enjoined. — 1st The patient must carefully avoid every cause that will tend to increase the activity of the circulation, by using the gentlest exercise, and mildest food, with a perfect abstinence from every excess.

2nd He must avoid taking cold, as it will prove more obstinate when induced by catarrh, and the consequences are more dangerous.

3rd The state of the pulse, and respiration must be guarded, and activity of circulation, with either pain or oppression removed without delay, by the appropriate remedies, as small bleedings, opiates, low diet, rest, cooling applications, and the whole antiphlogistic plan.

4. In obstinate cases, a salivation should be tried, though this should not be attempted, when dependent upon a tuberculated state of the lungs. Emetics frequently repeated in this latter condition are entitled to much confidence, acting as divellents.

Haemoptysis, appears to be a salutary process intended by nature to remove anpsecatea, topical congestion, and hence it becomes an extremely interesting subject to the medical practitioner.

He is by no means to attend exclusively to the mere bleeding, as the nature of the cause which induced it, and the dangerous consequences to be anticipated from its frequent occurrence, each demand the exercise of his judgement, founded on correct anatomical knowledge, and timely interference of his skill.

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246 Race St.

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